10/692759

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Patent Number	7,173,281 B2
Issued	February 6, 2007
First Named Inventor	Yoshiharu HIRAKATA et al.
Group Art Unit	2814
Examiner Name	Wai-Sing Louie
Total Number of Pages in This Submission	
Attorney Docket Number	740756-2656

ENCLOSURES *(check all that apply)*

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
    - ☐ Amendment / Reply
    - ☐ After Final
    - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Information Disclosure Statement
  - ☐ PTO-1449
- ☐ Certified Copy of Priority Document(s)
- ☐ Response to Missing Parts/ Incomplete Application
  - ☐ Response to Missing Parts under 37 CFR 1.52 or 1.53
- ☐ Assignment Papers *(for an Application)*
- ☐ Drawing(s)
- ☐ Declaration and Power of Attorney
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s) _____
- ☐ After Allowance Communication to Group
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
- ☐ Proprietary Information
- ☐ Status Letter
- ☐ Application Data Sheet
- ☐ Request for Corrected Filing Receipt with Enclosures
- ☐ A self-addressed prepaid postcard for acknowledging receipt
- ☒ Other Enclosure(s) (*please identify below*):
  - **1) Request for Certificate of Correction**
  - **2) Certificate of Correction**

Remarks

☒ The Commissioner is hereby authorized to charge any additional fees required or credit any overpayments to Deposit Account No. 19-2380 for the above identified docket number.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm *or* Individual name	Marc W. Butler, Reg. No. 50,219 Nixon Peabody LLP 401 9th Street, N.W. Suite 900 Washington, D.C. 20004-2128
Signature	
Date	March 14, 2007

Certificate
MAR 16 2007
of Correction

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

I hereby certify that this correspondence is being:

- ☐ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop _____, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450
- ☐ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (571) 273-8300

MAR 19 2007

Date

Signature

Typed or printed name

Effective on 12/08/2004. *Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).*	*Complete if Known*
FEE TRANSMITTAL FOR FY 2005	Patent Number: 7,173,281 Issue Date: February 6, 2007 First Named Inventor: Yoshiharu HIRAKATA et al.
☐ Applicant claims small entity status. See 37 CFR 1.27	Examiner Name: Wai-Sing Louie
TOTAL AMOUNT OF PAYMENT ($)100.00	Art Unit: 2814
	Attorney Docket No.: 740756-2656

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☒ Deposit Account Deposit Account Number: 19-2380 Deposit Account Name: Nixon Peabody LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, **except for the filing fee**

☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-20238.

FEE CALCULATION

1. BASIC FILING, SEARCH AND EXAMINATION FEES

	FILING FEES		SEARCH FEES		EXAMINATION FEES		
Application Type	**Fee ($)**	**Small Entity Fee ($)**	**Fee ($)**	**Small Entity Fee ($)**	**Fee ($)**	**Small Entity Fee ($)**	**Fees Paid ($)**
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	**Fee ($)**	**Small Entity Fee ($)**
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple document claims	360	180

Total Claims		**Extra Claims**		**Fee ($)**		**Fee Paid ($)**	**Multiple Dependent Claims**	
	- 20 or HP =		x		=		**Fee ($)**	**Fee Paid ($)**

HP =- highest number of total claims paid for, if greater than 20

Indep. Claims		**Extra Claims**		**Fee ($)**		**Fee Paid ($)**
	- 3 or HP =		x		=	

HP =- highest number of independent claims paid for, if greater than 3

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

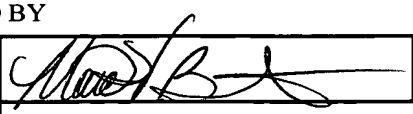
Total Sheets		**Extra Sheets**		**Number of each additional 50 or fraction thereof**		**Fee ($)**		**Fee Paid ($)**
	- 100 =		/ 50 =	(round **up** to a whole number)	x		=	

4. OTHER FEE(S) **Fees Paid ($)**

Non-English Specification, $130 fee (no small entity discount) _____

Other: Certificate of Correction fee $100.00

SUBMITTED BY

Signature		Registration No. (Attorney/Agent) 50,219	Telephone (202) 585-8000
Name (Print/Type)	Marc W. Butler		Date March 14, 2007

SEND TO: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Docket No. 740756-2656

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT application of	)	
Yoshiharu HIRAKATA et al.	)	Art Unit: 2814
Serial No. 10/692,759	)	Examiner: Wai-Sing LOUIE
Patent No. 7,173,281	)	Confirmation No. 8854
Issued: February 6, 2007	)	
Filed: October 27, 2003	)	
For: SEMICONDUCTOR DEVICE AND	)	
METHOD OF FABRICATING THE	)	
SAME	)	

REQUEST FOR CERTIFICATE OF CORRECTION

Mail Stop PETITIONS
Commissioner for Patents
Alexandria, VA 22313-1450

Sir:

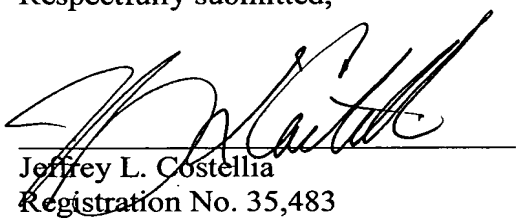
Pursuant to 35 U.S.C. § 255, and 37 C.F.R. § 1.323, this is a request for a Certificate of Correction in the above-identified patent. The mistake(s) identified in the appended Form are of a clerical or typographical nature, or of minor character, and resulted from an error made in good faith by patentee(s). Specifically, Applicants request that claims 13, 45, 77, and 107 be amended to change the height of the spacer to 0.5 μm to 10 μm. Such a change should be considered acceptable since the specification states that the range is 0.5 μm to 10 μm (See, for example, col. 6, lines 13-14) and one of skill in the art would therefore recognize "0.5 μm to 10 μm" in the foregoing claims as a clear typographical error.

Applicants authorize the Commissioner to charge the certificate-of-correction fee of $100, as set forth in 37 C.F.R. § 1.20(a), to Deposit Account No. 19-2380 to cover the costs of issuing the Certificate. Applicants also authorize any additional fees needed in connection with the filing of this request be charged to Deposit Account No. 19-2380.

Two (2) copies of PTO Form 1050 are appended. The complete Certificate of Correction involves three (3) pages.

Issuance of the Certificate of Correction containing the correction is earnestly requested.

Respectfully submitted,



Jeffrey L. Costellia
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UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO: 7,173,281 B2

DATED: February 6, 2007

INVENTOR(S): Yoshiharu HIRAKATA et al.

It is certified that errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Claim 13, Column 31 should read --A display device comprising:

a first substrate;

a plurality of pixels arranged in a matrix, each of which comprises a thin film transistor over the first substrate;

an interlayer insulating film over the thin film transistor;

a first alignment film over the interlayer insulating film;

a second substrate;

a plurality of spacers over the second substrate;

a second alignment film on the plurality of spacers and over the second substrate; and

a liquid crystal material interposed between the first alignment film and the second alignment film;

wherein each of the plurality of spacers has a first end, a second end between the first end and the second substrate, and a center portion between the first end and the second end,

wherein a width of the second end is larger than a width of the center portion,

wherein a taper portion is formed at the second end, and

wherein a height of the spacer is 0.5μm to ~~110~~ 10μm.--

Claim 45, Column 34 should read --A display device comprising:

a first substrate;

a plurality of pixels arranged in a matrix, each of which comprises a thin film transistor over the first substrate;

an interlayer insulating film over the thin film transistor;

a first alignment film over the interlayer insulating film;

a second substrate;

a conductive film over the substrate;

a plurality of spacers on the conductive film;

a second alignment film on the plurality of spacers and on the conductive film; and

a liquid crystal material interposed between the first alignment film and the second alignment film;

wherein each of the plurality of spacers has a first end, a second end between the first end and the second substrate,

wherein a contact surface between the second alignment film and the spacer is continuously connected to a contact surface between the second alignment film and the conductive film,

wherein a taper portion is formed at the second end, and

wherein a height of the spacer is 0.5μm to ~~110~~ 10μm.—

Claim 77, Column 36 should read --A display device comprising:

a first substrate;

a plurality of pixels arranged in a matrix, each of which comprises a thin film transistor over the first substrate;

an interlayer insulating film over the thin film transistor;

a first alignment film over the interlayer insulating film;

a second substrate;

a plurality of spacers over the second substrate;

a second alignment film on the plurality of spacers and over the second substrate;

a liquid crystal material interposed between the first alignment film and the second alignment film;

wherein each of the plurality of spacers has a first end, a second end between the first end and the second substrate, a center portion between the first end and the second end, and a lower portion between the center portion and the second end,

wherein an angle between a tangent plane at a center portion and a surface of the second substrate is larger than an angle between a tangent plane at a lower portion and the surface of the second substrate, and

wherein a height of the spacer is 0.5μm to ~~110~~ 10μm.--

Claim 107, Column 39 should read --A display device comprising:

a first substrate;

a plurality of pixels arranged in a matrix, each of which comprises a thin film transistor over the first substrate;

an interlayer insulating film over the thin film transistor;

a first alignment film over the interlayer insulating film;

a second substrate;

a plurality of spacers over the second substrate;

a second alignment film on the plurality of spacers and over the second substrate; and

a liquid crystal material interposed between the first alignment film and the second alignment film;

wherein each of the plurality of spacers has a first end, a second end between the first end and the second substrate, and a center portion between the first end and the second end,

wherein a width of the second end L_2 and a width of the center portion L_1 are set in the range of $1 < L_2/ L_1 < 2.5$, and

wherein a height of the spacer is 0.5μm to ~~110~~ 10μm.--

MAILING ADDRESS OF SENDER:

PATENT NO. 7,173,281

No. of additional copies

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UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO: 7,173,281 B2

DATED: February 6, 2007

INVENTOR(S): Yoshiharu HIRAKATA et al.

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a first alignment film over the interlayer insulating film;

a second substrate;

a plurality of spacers over the second substrate;

a second alignment film on the plurality of spacers and over the second substrate; and

a liquid crystal material interposed between the first alignment film and the second alignment film;

wherein each of the plurality of spacers has a first end, a second end between the first end and the second substrate, and a center portion between the first end and the second end,

wherein a width of the second end is larger than a width of the center portion,

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a first alignment film over the interlayer insulating film;

a second substrate;

a conductive film over the substrate;

a plurality of spacers on the conductive film;

a second alignment film on the plurality of spacers and on the conductive film; and

a liquid crystal material interposed between the first alignment film and the second alignment film;

wherein each of the plurality of spacers has a first end, a second end between the first end and the second substrate,

wherein a contact surface between the second alignment film and the spacer is continuously connected to a contact surface between the second alignment film and the conductive film,

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a first alignment film over the interlayer insulating film;

a second substrate;

a plurality of spacers over the second substrate;

a second alignment film on the plurality of spacers and over the second substrate;

a liquid crystal material interposed between the first alignment film and the second alignment film;

wherein each of the plurality of spacers has a first end, a second end between the first end and the second substrate, a center portion between the first end and the second end, and a lower portion between the center portion and the second end,

wherein an angle between a tangent plane at a center portion and a surface of the second substrate is larger than an angle between a tangent plane at a lower portion and the surface of the second substrate, and

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a first alignment film over the interlayer insulating film;

a second substrate;

a plurality of spacers over the second substrate;

a second alignment film on the plurality of spacers and over the second substrate; and

a liquid crystal material interposed between the first alignment film and the second alignment film;

wherein each of the plurality of spacers has a first end, a second end between the first end and the second substrate, and a center portion between the first end and the second end,

wherein a width of the second end L_2 and a width of the center portion L_1 are set in the range of $1 < L_2/ L_1 < 2.5$, and

wherein a height of the spacer is 0.5μm to ~~110~~ 10μm.--

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